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Measuring the efficiency of Babylon Banks banking performance and its impact on financial Sustainability

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Abstract

The research addressed the study of the efficiency of banking performance of the Bank of babel as an independent variable and its impact on financial sustainability as a dependent variable, which is one of the modern topics of great importance, as the efficiency of banking performance contributes to achieving a balance between profitability and financial sustainability, which enhances the ability of banks to face economic challenges. The importance of financial sustainability stems from the fact that it is a basic indicator of the ability of financial institutions to continue achieving their goals in light of economic fluctuations.

The research sought to measure the relationship between the efficiency of banking performance and financial sustainability by using a set of quantitative indicators such as cost to revenue, return on assets, return on equity, and capital adequacy ratio, during the period from 2016 to 2022, based on data from official annual reports.

The research came out with a set of conclusions, most notably the existence of a significant positive impact of banking performance efficiency on achieving financial sustainability in the long term, while a limited effect appears in the short term. The study recommended the necessity of enhancing the efficiency of banking performance by investing in financial technology, developing human resources, and adopting balanced banking policies aimed at achieving sustainable financial growth.

Keywords: Banking performance efficiency, financial sustainability, bank of babel, operational efficiency, banking sector

Introduction

The Iraqi banking sector is witnessing economic and political challenges that require effective strategies to enhance performance efficiency and achieve financial sustainability. Banking performance efficiency plays a pivotal role in improving operational capabilities and ensuring the provision of high-quality financial services, which enhances the stability of banks and their ability to confront crises. Financial sustainability is a key factor for banks to continue achieving their goals, avoiding financial crises, and ensuring a balance between revenues and expenses. In this context, the research aims to analyze the role of banking performance efficiency in enhancing financial sustainability and achieving sustainable growth.

Research methodology

Research problem: Through challenges, Iraqi banks face economic challenges such as inflation, unemployment, and political changes that affect performance efficiency. Technological developments and local competition also increase pressure on banks. In addition, banks suffer from administrative challenges and high operating costs, which hinders achieving a balance between costs and revenues.

Research Importance: The importance of the research stems from helping Iraqi banks achieve financial sustainability, which enhances the stability of the financial system and supports the national economy. It aims to improve the efficiency of banking performance by providing accurate data that enhances investor confidence and attracts investments. It also seeks to analyze indicators of financial efficiency and sustainability according to the current reality and international standards.

Research Objective

The research addresses many objectives, the most important of which are

- The study aims to evaluate the efficiency of banking performance in a sample of Iraqi banks during the period 2016-2022.
- It seeks to analyze the relationship between banking efficiency and financial sustainability, and to identify the factors affecting it, such as technology and management.
- It aims to examine the impact of efficiency on competitiveness and promoting sustainable growth.

Research Hypothesis

The study assumes the existence of a positive relationship between the efficiency of banking performance and the financial sustainability of Iraqi banks, and indicates that improving operational efficiency contributes to achieving sustainable financial results in the long term, despite the impact of economic, political, and technological factors on this efficiency.

Research Methodology: Several scientific methods will be adopted in completing the study, including the deductive method and the descriptive method in completing the theoretical aspect, in addition to the inductive method and the analytical method in the practical aspect.

Theoretical review

Banking performance efficiency: Concept and definition of banking performance efficiency: Banking performance efficiency means achieving the maximum possible outputs using available resources at the lowest cost. The concept goes beyond the optimal use of resources to include factors such as the size of the banking sector, the structure of economic units, and the role of banks in economic development. Banking efficiency is also measured at the level of one or more banks, with a focus on its connection to local economic goals and development. (Al-Jamil, 2011, p. 108) ^[5].

It can be defined as follows

- An efficient banking institution is defined as an institution capable of directing available economic resources towards achieving the greatest possible returns with the least possible waste, i.e. good and successful control over its material and human energies in terms of achieving the optimal size and providing a set of financial products on the other hand (Rice *et al.*, 2012, p. 62) ^[24].
- Banking performance efficiency expresses the relationship between the bank's inputs and outputs, as it is evident when the outputs are increased with the same inputs, or the same outputs are achieved using fewer inputs, or the outputs are provided with the least possible loss of inputs, which indicates efficiency (Taha, 2000, p. 40) ^[6].

The importance of banking performance efficiency

Banking efficiency is of great importance in light of the current developments in the banking sector, given the prominent role played by banks in providing financing and banking services, which play a crucial role in driving economic development processes, and is represented in the following (Aql, 2006, p. 90) ^[10]:

- Achieving an appropriate investment adequacy rate contributes to avoiding risks associated with the funds available to the bank, and maintaining an appropriate level of capital enhances the reduction of risks related to high-return investments.
- Adherence to the lending standards set by the monetary authorities contributes to getting rid of bad loans, which improves asset quality and positively reflects on profitability.
- High efficiency rates lead to effective management, as they contribute to reducing operating expenses, which enhances raising the bank's net income.
- Banks seek to reduce the cost of services while maintaining high quality, which enhances the growth of deposit volume. This allows for the provision of new sources of funds, which contributes to financing additional investments that generate additional profits and enhance the bank's financial position.

Factors affecting the efficiency of banking performance

The factors affecting the efficiency of the bank are divided into internal and external factors as follows (Zainab, et, 2016, p12-16) ^[23]:

Internal factors: These are the policies followed by the bank, whether financial or administrative, which depend on the degree of competition between banks and the size of economic activity, and that these factors are related to liquidity, asset size, return on investment, focus on equity and asset size.

External factors: These are factors related to policies imposed on the bank, such as legislation imposed by the state and the central bank, and are represented by interest rates and the size of cash reserves. In addition, it is also related to the size of credit granted by those banks. The most important factors affecting banks can be explained as follows:

Profitability: Banks finance their investments from the money of others from the bank's own money in an effort to maximize the wealth of owners from the return on investment or equity, and interest rates are one of the most important factors affecting the profitability of banks, as the profitability of banks increases when interest rates rise, loans are high and low on deposits, which means an increase in the profit margin, in addition to the fact that competition is one of the factors affecting profitability.

Degree of risk: The purpose of risk management is to reduce the possibility of losses, so risks must be studied, probabilities determined and the results of the maximum expected risks evaluated, and therefore risk management should not affect the efficiency of the bank.

Administrative factors: The policy followed by some banks is wrong, which is the policy of favoritism in ranks and salaries, which leads to a decrease in the efficiency of the banking system as well as a decrease in employee morale, and the interest of employees in their work will lead to poor efficiency and performance in the bank.

Degree of competition: It means high quality in producing services at the lowest costs, thus controlling the market and preventing new competitors from entering the market.

Governmental regulations and legislation: Governmental regulations and legislation control banks through fiscal and monetary policy, in order to preserve depositors' money, control the money supply, provide credit to various sectors at a low interest rate, collect revenues through taxes, and achieve other economic goals. 6. Economic conditions: The efficiency of banks is affected by changes in economic conditions, as these changes are reflected in indicators of economic activity, economic stability, legislation, inflation rates and price fluctuations, in addition to national and individual income, customs and traditions of society, and the level of economic and technological development (Ali, 1999, p. 397) ^[8].

Financial Sustainability

The concept of financial sustainability: The concept of financial sustainability is a relatively modern concept, as this term appeared after the concept of sustainable development, and it is a part of it that concerns banks and their financial and economic aspects and their continuity and sustainability, according to the theory of economic unity, it is a study to understand how the unit works and control internal and external variables, which helps to sustain it and increase wealth and resources effectively in it. (Jones, 2013, p3) ^[25].

Financial sustainability is considered a relatively modern indicator, as it shows the state's ability to bear its financial obligations without the risk of bankruptcy or reliance on more external debt. This criterion is secondary as an element that risk-averse investors pay attention to when making investment decisions, as it reduces the risks of refinancing (Wemer, *et al.*, 2022, p1) ^[26] and bankruptcy, which enhances returns in the capital market while taking into account financing restrictions and bankruptcy costs

Financial sustainability can be defined as

The government's ability to fulfill its current and future obligations without the need to make fundamental adjustments to its policy Finance (Hamad, 2015, p. 79) ^[3].

It is defined as: the ability to bear debts and provide the means to meet all current and future government obligations, and also includes the ability to gradually rebalance public expenditures and revenues in the future without a significant impact on macroeconomic variables (Ali, 2015, p. 325) ^[2].

The International Monetary Fund defines financial sustainability as: the situation in which the borrower is able to continue servicing its debts without the need to make a fundamental change in public expenditures and revenues in the future. That is, financial sustainability requires not accumulating a general budget deficit so that economies do not have to restructure spending priorities and financing mechanisms. The deficit in the future in order to finance the debt burden (Qaddouri, 2021, p. 221) ^[7].

The importance of financial sustainability

Financial sustainability plays an important and major role in improving performance in the economic unit through the following:

- Improving access to capital: By adopting aspects of financial sustainability in periodic reports and the performance of the institution or organization, which leads to improving the institutional strategic

performance, which in turn will be reflected in its performance towards improving investment returns and the ability to attract capital, especially in the long term. Term financing methods and providing better financing terms.

- Profitability and growth: This is done by creating financial value for the organization by providing appropriate opportunities to increase income, reduce costs, manage risks, enhance measures and encourage cooperation with stakeholders in a way that contributes to a deeper understanding of their needs, which in turn is reflected in directing investments and stimulating competitiveness and innovation (Esterman, *et al.*, 2011, p16) ^[20].
- Compliance with corrective action plans and risk management: Knowing how to manage sustainability leads to identifying risks in an integrated manner, which leads to developing appropriate strategies to mitigate risks, which enhances the institution's ability to plan strategically in the long term, and helps investors and analysts to identify the institution or the organization's ability to achieve its investment goals.
- Promoting the brand of non-profit organizations: Non-profit organizations, like for-profit organizations, rely on their brand marketing efforts to promote their services and maintain their continuity. Hence, the importance of creating and promoting the brand in a way that makes it work clearly and continuously to convey the organization's message and the services provided in a way that distinguishes it from other organizations. One of the most important elements of creating a brand is defining and developing the organization's mission, services, goals and objectives. The brand must embody a set of characteristics and features that enable individuals outside the organization to present them in a consistent and continuous manner. Developing a marketing plan also helps to convey a social message that builds trust between the organization and its beneficiaries (Lisa, 2012, p4). - The role of management in promoting financial sustainability: The bank's management plays a major role in developing a roadmap for the bank's vision and role towards financial sustainability. Good planning for implementation procedures and establishing appropriate governance mechanisms will contribute to the management's success in integrating financial sustainability into the bank's business and activities. There are some guiding steps that management can adhere to (Bursa Malaysia, 2010, p18) ^[12] to achieve success in implementing financial sustainability. • Integrating the idea of financial sustainability into the bank's activity and values by establishing sustainability principles and applying international standards.
- Communicating to fulfill the bank's obligations, and this communication is done internally with employees and staff and externally with stakeholders.
- Establishing the principle of sustainability in managing expected risks by adhering to economic, societal and environmental considerations and monitoring and managing them.
- Integrating financial sustainability into the bank's strategy and implementing the necessary supervisory procedures and monitoring the bank's performance in achieving its goals.

- Preparing the necessary reports to disclose sustainability work to the relevant parties in accordance with international standards after achieving success in the previous steps above, management moves to a more advanced level.
- Granting rewards to those responsible for sustainable work and those responsible for the bank's successes in achieving financial savings.
- Guiding and training employees and staff on the role of integrating financial sustainability into the bank's business.
- Appointing managers with experience in the fields of sustainability and whose competence and integrity have been proven.
- Taking financial sustainability into account in the bank's pivotal decisions such as acquisition or merger decisions or any pivotal investment decision in the bank.

Practical and applied analytical research:

Analysis of the efficiency of banking performance of Babylon Bank: The table shows the performance of Babylon Bank from 2016 to 2022 with an analysis of several financial indicators related to profitability, asset utilization index, and competitive efficiency over different years. The explanation will include annual trends for each indicator and an explanation of the changes that occurred.

Table 1: Indicators of banking performance efficiency of Babylon Bank

ratios	equation	Time limits (years)						
		2022	2021	2020	2019	2018	2017	2016
1. Profitability indicators								
ROA(return on assets ratio)	Net Profit ÷ Total Assets	.78%	1.06%	2.68%	.31%	1.01%	1.03%	2.13%
Deposit return rate	Net Profit ÷ Total Shareholders' Equity	1.31%	1.80%	4.46%	0.48%	1.39%	1.27%	2.77%
Deposit return rate	Net profit ÷ Total deposits	2.22%	2.96%	7.76%	1.04%	5.45%	9.12%	12.84%
2- Asset Utilization Index								
Use of assets	Total Revenue ÷ Total Assets	1.99%	2.12%	0.04%	2.14%	3.55%	4.91%	5.72%
3- Competitive efficiency indicators								
Administrative Expense Ratio	Administrative expenses ÷ Total expenses	49.45%	86.64%	84.32%	70.71%	605.55%	78.83%	66.21%
Expense Ratio	Total expenses ÷ Total assets	2.09%	3.67%	3.13%	2.17%	3.01%	4.45%	4.50%
Cost-Benefit	Total expenses ÷ Total revenues	105.11%	173.25%	752.3%	101.54%	84.77%	90.55%	78.67%

The table was prepared by the researcher based on data from the annual report of the Bank of Babylon for the period (2016-2022).

Profitability indicators

Return on Assets (ROA): The ROA started at a good level of 2.13% in 2016, then declined significantly to 0.31% in 2019, improving to 2.68% in 2020, before declining again to 0.78% in 2022.

Economic impact: The bank's efficiency in utilizing assets was affected by the economic slowdown in Iraq, especially with the decline in oil prices, which led to a decline in government spending and a slowdown in economic activity, and the lack of demand for loans and investments may be a reason for the decline in profits generated from assets.

Covid-19 pandemic: The pandemic posed a major challenge to banks in Iraq in 2020, which led to pressure on assets, but the apparent improvement in 2020 may be the result of changes in operational strategies within the bank to avoid further losses.

To increase profitability, the bank is recommended to develop a strategy to invest assets in ways that achieve better returns, such as diversifying financial products to include financing development projects outside the oil sector.

Return on Equity (ROE)

The ROE ratio has been declining steadily from 2.77% in 2016 to 0.48% in 2019, then rising significantly to 4.46% in 2020, before declining again to 1.31% in 2022.

Economic Impact: Return on equity has been significantly impacted by the volatility of the Iraqi economy and the

decline in oil prices, which reduced investment opportunities and increased risks, and increased economic pressures affected the bank's attractiveness to investors looking for sustainable returns.

Rise in 2020: The noticeable improvement in 2020 may have been the result of temporary incentive strategies to avoid greater losses during the pandemic, but it did not continue in subsequent years.

The bank should improve its management of long-term investments and diversify its investor base to increase financial stability and attract more shareholders looking for stable returns.

Deposit Return Ratio

The deposit return ratio declined sharply from 12.84% in 2016 to 2.22% in 2022, with a significant decrease to 1.04% in 2019.

Economic impact: This decline indicates a weakness in the bank's exploitation of deposits to achieve profitable returns, which may be due to the decline in investment activity due to the economic crises in Iraq.

Interest rate impact: With the decline in interest rates in an economic environment suffering from a contraction, the bank finds it difficult to achieve returns on deposits. The lack of viable investment opportunities limits the bank's ability to achieve profits from deposits.

The bank recommends developing an investment strategy

based on geographical and investment diversification to improve returns on deposits, in line with changes in the economic environment.

Asset Utilization Index

Asset Utilization: (Total Revenue ÷ Total Assets)

The asset utilization ratio declined from 5.72% in 2016 to 0.04% in 2020, then improved slightly to 1.99% in 2022.

Economic Impact: This decline indicates major challenges in using assets effectively, as a result of the general economic recession in Iraq, and the economic slowdown resulting from the financial and security crises in the country, which reduced the bank's chances of achieving sufficient revenues from assets.

Impact of Economic and Political Instability: Instability has restricted the bank's investment capacity, resulting in unused assets or ineffective investment projects.

The bank is advised to focus on safer and more productive investment strategies in sectors with sustainable returns, while improving the efficiency of asset utilization to contribute to achieving profitable revenues.

This indicator is one of the key factors that reflect financial performance, and illustrates the importance of adopting effective management strategies to enhance operational efficiency and achieve sustainable growth.

Competitive efficiency indicators

Administrative Expenses Ratio (Administrative Expenses ÷ Total Expenses). The administrative expenses ratio has fluctuated significantly, rising to 605.55% in 2018 before declining to 49.45% in 2022.

Economic Impact: The increase in the ratio in 2018 reflects a significant increase in administrative costs, which may have been due to financial challenges in Iraq that prompted the bank to increase operating and administrative expenses to cope with the circumstances.

Improvement in recent years: The decrease in 2022 may be the result of controlling administrative expenses and improving operational efficiency to cope with economic pressures that reduce the bank's revenues.

The bank should use financial analysis tools to control administrative costs and achieve a balance between spending and revenues in light of changing economic conditions.

Expense ratio (Total expenses ÷ Total assets)

The ratio decreased from 4.50% in 2016 to 2.09% in 2022, with slight fluctuations in the intermediate years.

Economic impact: The improvement reflects the bank's ability to control asset-related expenses despite economic challenges, and the continued decline in the ratio indicates the bank's efforts to improve financial efficiency despite economic fluctuations.

Increase in some years: The slight increase in 2020 and 2021 may be the result of operational pressures due to the difficult economic conditions witnessed in Iraq.

The bank is advised to continue improving the management of asset-related costs to achieve higher financial sustainability.

Cost-benefit (Total expenses ÷ Total revenues)

The cost-benefit ratio increased significantly to 752.3% in 2020, then declined to 105.11% in 2022.

Economic impact: The high ratio in 2020 indicates the impact of the severe financial crisis resulting from the decline in oil prices and the Covid-19 pandemic, which increased operating costs compared to revenues.

Subsequent improvement: The gradual improvement reflects the bank's efforts to control expenses and reduce the negative effects of the economic crises.

The bank must continue to improve financial efficiency by carefully managing costs and increasing revenues through diversifying investments and banking activities, but these figures still indicate ongoing pressures. Accordingly, the bank has not achieved financial sustainability, which requires urgent measures to improve cost management and increase revenues to ensure future financial stability.

It is noted from above the banking performance efficiency ratios that were relied upon in the theoretical frameworks and as agreed upon in the professional organizations concerned with efficiency analysis, which differ from the banking performance ratios adopted by the banks in the study sample in the current reality, especially Babylon Bank, in addition to the existence of some differences in the results (indicators) as a result of adopting other methods to extract them, as it is noted that the ratio of ownership rights to assets decreased, which indicates the optimal exploitation of deposits and other liabilities and how to collect and invest them, in addition to the decrease in profitability indicators until it reached a loss and then profits were achieved in 2022, which indicates an improvement in the banking efficiency of Babylon Bank. Economic analyses reflect the impact of the difficult economic environment in Iraq on the performance of Babylon Bank through various indicators, as fluctuations in oil prices, the pandemic, and political instability led to challenges in increasing profitability, achieving efficiency in exploiting assets, and improving competitive efficiency.

Comprehensive Economic Recommendations

Adapting to economic fluctuations: It is recommended that the bank increase its flexibility by diversifying investment activities and reducing its dependence on highly volatile revenue sources such as oil.

Improving operational efficiency: Increasing focus on operational efficiency to control administrative expenses and reduce waste, especially in light of economic crises.

Increasing financing opportunities: It is recommended to develop diverse financing products that are compatible with the nature of the Iraqi economy and meet the needs of different sectors, which will help the bank achieve sustainable financial growth.

Financial Sustainability Analysis of Babylon Bank

The table below shows the performance of Babylon Bank from 2016 to 2022 with an analysis of several financial sustainability indicators related to risk, liquidity, and indebtedness, over different years. The explanation will include the annual trends for each indicator and an explanation of the changes that occurred.

Table 2: Financial sustainability indicators of the Bank of Babylon

ratios	equation	Time limits (years)						
		2022	2021	2020	2019	2018	2017	2016
1. Indicator: R Risk Indicators								
Capital Adequacy Ratio =	Regulatory Capital ÷ Risk Weighted Assets	%231.50	%231.80	%252.40	%253.10	%259.70	%238.70	%181.40
NPL Ratio =	Total NPLs ÷ Total Loans	%10.7	%10.93	%11.01	%11.01	%11.05	%10.95	%10.72
Indicator D: Liquidity Indicators								
Indicator D1: Current Ratio	Current Assets ÷ Current Liabilities	%69.97	%70.58	%72.98	%75.18	%141.11	%288.94	%302.12
Indicator D2: Current	Ratio Current Assets ÷ Total Assets	%28.06	%27.40	%27.56	%25.64	%33.30	%45.18	%64.86
Indicator D3: Current Ratio	Working Capital ÷ Total Liabilities	%69.67	%66.86	%68.98	%71.05	%121.17	%247.93	%282.05
Indicator: E: Debt Index								
Indicator E: Debt Ratio	Total liabilities ÷ Total assets	%40.28	%40.98	%39.96	%36.09	%27.48	%18.22	%23.00

The table was prepared by the researcher based on data from the annual report of the Bank of Babylon for the period (2016-2022).

Risk indicators

Capital adequacy ratio (regulatory capital ÷ risk-weighted assets): The capital adequacy ratio measures the bank's ability to bear risks by comparing regulatory capital to the risks it is exposed to as a result of its investments and assets. This ratio shows the bank's ability to absorb sudden losses without negatively affecting its financial stability. The higher the ratio, the more stable the bank is and the more able it is to face financial challenges. In 2016, the capital adequacy ratio was at 181.40%, a high level that reflects the bank's ability to bear potential losses without affecting its financial stability. The capital adequacy ratio increased until it peaked in 2018 at 259.7%, then gradually declined until it reached 231.5% in 2022. Despite this decline, the ratio remains high, indicating that the bank maintains a good ability to bear losses. This reflects the bank's ability to face financial risks and continue to maintain a strong capital base. Despite the economic challenges, the relative stability of this ratio indicates the effectiveness of risk management and the ability to achieve financial sustainability. Financial and Economic Analysis: A high capital adequacy ratio demonstrates the bank's ability to absorb losses, which enhances its financial stability and increases investor confidence. On the economic level, this ratio enables the bank to support the economy by expanding its lending activity without increasing risks. By analyzing the trend of the ratio from 2016 to 2022, we find that the bank has achieved financial sustainability by maintaining a high ratio that exceeds the required international limits. In addition, the efficiency of banking performance plays an important role in achieving this sustainability through effective risk management, improving profitability and stabilizing the credit portfolio. This calls for strengthening regulatory capital by issuing new shares or attracting investors to compensate for the gradual decline in the ratio. And improving risk management by reducing high-risk assets to maintain high capital adequacy levels.

Non-performing loans ratio (Total non-performing loans ÷ Total loans): The non-performing loans ratio measures the bank's ability to manage credit risk by comparing total non-performing loans to total loans granted. This ratio reflects the quality of the bank's credit portfolio; the higher

the ratio, the higher the risk associated with the loans, which means that there are more borrowers who are facing difficulties in repayment. This ratio is an important tool for assessing the bank's ability to achieve financial sustainability, as it reflects the efficiency of risk management and the bank's ability to maintain its profits and financial stability. In 2016, the bank's non-performing loans ratio was 10.72%, indicating an acceptable level of credit risk. Although this ratio is not very low, it reflects the bank's ability to manage its loans reasonably, which enhances confidence in its financial stability. This performance demonstrates the balance between providing loans and recovering them, which indicates a good basis for achieving financial sustainability. In 2022, the non-performing loans ratio declined to 10.7%, reflecting the bank's continued improvement in the quality of its credit portfolio. This slight decrease reflects the effectiveness of the credit risk management strategies adopted by the bank, which helped it reduce financial pressures on borrowers. Although the ratio is still a bit high, the overall performance indicates good financial stability and enhances the chances of achieving financial sustainability in the long term. It can be said that the bank has achieved financial sustainability, as stable performance indicates the quality of its credit portfolio. The efficiency of the bank's performance also plays a crucial role in achieving this sustainability through effective loan management and the ability to recover them.

Financial and Economic Analysis: The stability of the NPL ratio reflects the bank's ability to manage credit risks relatively effectively, reducing pressures on profitability. Economically, a slight decrease in the ratio may indicate slight improvements in collection strategies that support financial stability. Strengthening collection procedures and facilitating loan restructuring programs for distressed borrowers. Reviewing the lending policy to reduce credit risks by focusing on customers with high credit ratings.

Liquidity indicators

Current ratio: (Current assets ÷ Current liabilities)

1. It measures the bank's ability to cover its short-term obligations using available assets. The higher this ratio is, the greater the bank's ability to meet its obligations.

In 2016, the bank's current ratio reached 302.12%, indicating a strong ability to cover its short-term obligations using its current assets. This ratio reflects a stable and comfortable financial position, as it was very sufficient to meet financial requirements, which enhances confidence in the bank's sustainability and its ability to manage liquidity effectively.

2. The current ratio witnessed a sharp decline to 69.97% in 2022, indicating a continuous deterioration in the bank's ability to cover its short-term obligations, reflecting the continued pressure on the ability to cover short-term obligations. This continuous decline indicates an uncomfortable financial position, and reflects the urgent need to improve liquidity management and business strategies.

Current ratio: (Current assets ÷ Current liabilities)

It measures the bank's ability to cover its short-term obligations using available assets. The higher this ratio is, the greater the bank's ability to meet its obligations. In 2016, the bank's current ratio reached 302.12%, indicating a strong ability to cover its short-term obligations using its current assets. This ratio reflects a stable and comfortable financial position, as it was very sufficient to meet financial requirements, which enhances confidence in the bank's sustainability and its ability to manage liquidity effectively. The current ratio witnessed a sharp decline to 69.97% in 2022, indicating a continuous deterioration in the bank's ability to cover its short-term obligations, reflecting the continued pressure on the ability to cover short-term obligations. This continuous decline indicates an uncomfortable financial position, and reflects the urgent need to improve liquidity management and business strategies.

Financial and economic analysis

This decline shows that the bank is facing pressures in liquidity management, which is likely to negatively affect its financial stability and its ability to provide new loans. From an economic perspective, low liquidity limits the bank's ability to support the economy through lending, and thus, this trend shows that the bank has not achieved the required financial sustainability, which calls for taking urgent measures to improve liquidity management and business strategies to ensure better financial stability in the future. We recommend increasing liquid assets to enhance liquidity, such as converting part of investments into easily liquid assets, and diversifying liquidity sources by attracting more short-term deposits to increase the bank's ability to meet its obligations.

Current ratio: (Current assets ÷ Total assets)

Reflects the bank's ability to use its current assets to cover all its obligations. This ratio helps assess the effectiveness of asset management. In 2016, it reached 64.86%, indicating a relatively good financial position. This ratio reflects the bank's ability to use its current assets effectively to cover a large portion of its total assets. This ratio declined to 28.06% in 2022, reflecting a decrease in the contribution of current assets to total assets. Despite this slight improvement, the ratio is still at low levels, which means that the bank is still facing major challenges in liquidity management and financial sustainability.

Financial and economic analysis: A low ratio means increasing financial pressures and a weakness in the bank's ability to cover its obligations, which may limit its financial flexibility and reduce its opportunities to finance economic projects. Low ratios show that the bank has not achieved the required financial sustainability, which necessitates the need to take urgent measures to improve asset and liability management and enhance liquidity efficiency to ensure better financial stability in the future.

We recommend improving asset allocation to increase current assets within total assets, which enhances the bank's liquidity, and increasing the quality of liquid assets to ensure the availability of the necessary financial resources to meet operational needs without compromising financial stability.

Current ratio: (Working capital ÷ Total liabilities)

It measures the bank's ability to use working capital (current assets minus current liabilities) to cover all obligations. This ratio reflects the bank's ability to maintain sufficient liquidity in light of its obligations. In 2016, the bank's current ratio reached 282.05%, indicating a strong ability to cover liabilities using working capital. The bank's financial position was stable and comfortable, reflecting strong financial sustainability in that year.

The current ratio (Working capital ÷ Total liabilities) decreased sharply from 282.05% in 2016 to 69.67% in 2022, showing a decline in the bank's ability to cover its obligations using working capital, indicating the continuation of financial challenges, and calling for strengthening liquidity management to achieve better financial sustainability.

Financial and Economic Analysis: This continued decline reflects pressures on the bank's short-term liquidity management, and may increase the likelihood of financial risks in the future. Economically, weak working capital limits the bank's ability to finance projects and enhance economic activity, which calls for improving working capital management by increasing current assets, restructuring short-term liabilities, and diversifying short-term investments to achieve continuous returns and enhance working capital.

Debt indicators

Debt ratio: (Total liabilities ÷ Total assets)

The debt ratio measures the extent to which the institution relies on debt financing compared to its assets, as this ratio reflects the relationship between total liabilities (debts and obligations) and total assets (assets). In 2016, the bank's debt ratio was 23.00%, indicating a good financial position and effectiveness in managing liabilities compared to assets. The ability to cover liabilities was high, reflecting strong financial sustainability in that year. The debt ratio rose to 40.28% in 2022, indicating the bank's increased reliance on debt to finance its assets, reflecting the continuation of financial challenges and the need for effective strategies to enhance financial sustainability.

Financial and Economic Analysis: The upward trend in the debt ratio highlights the bank's reliance on debt, which increases liquidity risks and reduces its flexibility in managing assets. Economically, the increasing reliance on external financing exposes the bank to more financial risks, especially in difficult economic times, which requires

reducing reliance on debt by increasing capital or attracting new investors, strengthening debt management to improve long-term financial stability, and restructuring debt to reduce financing costs and enhance financial stability.

It is noted from the above ratios (financial sustainability ratios) that they have been affected by the banking performance efficiency ratios, some of which were high and began to decline, while others were low and began to rise as a result of one of their components being affected by the efficiency of banking performance, indicating an improvement in performance at Babylon Bank that led to an improvement in financial sustainability.

Trends in Babylon Bank indicators show a disparity in financial performance. While the bank has a good level in the capital adequacy ratio, there are noticeable declines in liquidity indicators and an increase in reliance on debt, and the continuation of these trends may lead to a weakness in the bank's financial flexibility and limit its ability to support the economy.

General recommendations based on trends

- Increase regulatory capital to maintain a high capital adequacy ratio, which enhances the bank's stability.
- Improve liquidity management by directing a larger portion of assets towards current assets and diversifying liquidity sources.
- Reduce reliance on debt financing by increasing capital and attracting new investors to improve the bank's long-term stability.
- Improve the quality of the credit portfolio by developing lending and collection strategies, which reduces the percentage of non-performing loans and enhances the sustainability of profitability.
- Following these recommendations will help Babylon Bank enhance its financial indicators and achieve strong sustainability, which will enable it to provide greater support to economic activity and enhance its role in local development.

Conclusions and Recommendations

Conclusions

- The efficiency of banking performance is represented by the ability to use the minimum inputs (deposits and capital) to produce the best outputs (loans and investments), by relying on the optimal use of available resources to produce the best service at the lowest possible cost.
- The efficiency of banking performance is considered one of the vital topics in the field of economics and finance, due to its direct impact on the stability of the financial system and economic growth.
- The relationship between the efficiency of banking performance and financial sustainability is a direct relationship. The higher the performance of the bank, the more it leads to achieving financial sustainability. In addition, banks, through their banking operations, aim to improve banking efficiency through their commitment to all requirements issued in the regulatory processes for banking work, whether local or international, especially the requirements and instructions of the Central Bank.
- Performance efficiency contributes to improving financial sustainability by improving revenues and

reducing costs. It increases profitability and improves the return on assets (ROA) and the return on shareholders' equity (ROE), as well as providing new and innovative banking services and products. It increases the return on deposits, and improving the efficiency of asset use increases revenues, and reducing administrative expenses improves profitability.

- Technology and innovation contribute to improving financial performance. Implementing effective technology policies improves technology, which leads to improving the efficiency of technological and innovative processes. Improves technology and innovation.

Recommendations

- All banks should rely on efficiency to achieve their goals and determine the relationship between the resources used and the outputs in an effective manner with the aim of maximizing the outputs and reducing the inputs.
- Rely on the efficiency of banking performance because of its direct impact on the stability of the financial system and economic growth.
- The banks in the study sample should adopt financial sustainability to obtain revenues to cover expenses and meet current financial obligations without compromising its ability to meet its financial obligations in the future to ensure continued development and achieve the required goals.
- The banks in the study sample should improve the relationship between the efficiency of banking performance and financial sustainability to achieve high performance that leads to achieving financial sustainability.
- Improving performance efficiency: by increasing the return on assets (ROA) and return on equity (ROE): policies must be implemented to improve revenues and reduce costs to increase profitability, develop effective investment policies to achieve higher returns, improve the return on deposits ratio, provide new and innovative banking services and products to attract customers, improve the quality of services to increase deposits, improve the use of assets, develop policies to improve the efficiency of asset use to increase revenues, implement effective investment policies to increase revenues, reduce administrative expenses, implement austerity policies to reduce administrative expenses, and improve the efficiency of administrative processes to reduce costs.

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